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AUTHOR Thornton, Stephanie
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ABSTRACT

The developmental increase in the ability to solve problems is a puzzle. Does it come from basic changes in mental skills, or is it a matter of practice? This book from the Developing Child series synthesizes recent research examining children's problem-solving skills development. Chapter 1 presents the major themes: (1) there is increasing evidence that problem-solving skills develop from discovering and using information and interpreting feedback, rather than through development of logical skills; (2) problem-solving involves change, moving from one idea to a new one; and (3) problem-solving is also a social process involving emotions as well as skill. Chapter 2 considers traditional assumptions about problem-solving development and concludes that logic is just one of many strategies one can select. Chapter 3 includes examination of inherent problem-solving skills in infants, their developing ability to draw inferences, how task knowledge can alter strategies and types of reasoning available, the kinds of concepts a child can use, and the development of metacognitive awareness. Chapter 4 examines dynamic processes shaping problem-solving, including initial strategy selection, strategy discovery through reflection on the elements of a successful strategy, and feedback use. Chapter 5 examines shared problem-solving with peers or with a skilled partner, including scaffolding and guided participation, task and context influences in teaching problem-solving skills, and the role of confidence and control. Chapter 6 summarizes the nature and malleability of the child's problem-solving skills and future directions for research. Contains approximately 50 references. (KDFB)